

Erosion Blanket: Turf Reinforcement

(sq ft.)
CODE 831



(Source: USDA - Soil and Water Conservation District)

DEFINITION

Protective reinforced non-degradable materials formed into a mat. Some mats have degradable materials used in conjunction with non-degradable material to establish turf.

PURPOSE

The purposes of this practice are to reinforce vegetation in medium to high flow conditions and protect soil surface from rain drop impact.

CONDITIONS WHERE PRACTICE APPLIES

Areas of concentrated flow and where natural vegetation alone will not sustain expected flow conditions or provide sufficient long term erosion protection.

CRITERIA

The TRM (Turf Reinforcement Mat) shall be selected based on sun/shade conditions, shear stress, steepness of slope, and expected flow velocities.

TRMs shall be installed after any of the

applicable following practices have been completed: practice standards **TEMPORARY SEEDING 965** or **PERMANENT SEEDING 880** as well as construction specifications **26 TOPSOILING, 6 SEEDING, SPRIGGING, and MULCHING, 21 EXCAVATION.**

The mat shall be in firm contact with the soil. Under no circumstances should the blanket be allowed to bridge over surface irregularities. It shall be anchored per the manufacturer's recommendation with the proper number and spacing of wire staples. The staples/pins shall be the proper width and length to meet the manufacturer's recommendations and per IUM Standard Drawing **IUM 531 (yet to be developed)** and IUM material specification **IUM 831.**

In medium to high flow channels the mats shall be unrolled upstream to downstream, parallel to the direction of flow. The upstream edge of the mat shall be toed into an anchor. All over

laps shall be 6" and stapled, fold and trenched per manufacturer recommendations. Staple check slots are recommended at 40' intervals using a double row of staples staggered 4" apart and 4" on center over the width of the channel.

areas that may be failing. If the mat/mats have failed due to high flow, stronger mats may be needed.

CONSIDERATIONS

TRMs will reinforce the vegetation from medium to high flow conditions. These mats will also control erosion and help seed establishment. These mats will not break down over time. Matting selection shall be done based on shear stress levels.

PLANS AND SPECIFICATIONS

Plans and specifications for installing TRMs shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose. The plans shall include the following items at a minimum:

1. Location of TRM
2. Type of TRM
3. Location and cross section of anchor trenches
4. Staple patterns
5. Installation and maintenance schedules
6. Standard drawing IUM-531

OPERATION AND MAINTENANCE

Inspect all TRMs periodically during establishment. Repair or replace any